

REMARKS

Claims 1-11 are pending in the present application. A Rule 132 Declaration of Dr. Reinder LH Bolhuis, a named inventor of the present application, is attached hereto. Rule 132 Declarations of Egbert Oosterwijk and Sven Warnaar, listed coinventors of a U.S. patent application, serial number 10/470,940, which claims a hybridoma cell producing G250 monoclonal antibody, are attached hereto. No new matter is introduced.

February 26, 2007 Final Office Action

According to the February 26, 2007 Final Office Action, Applicant's Amendments filed December 20, 2006 have overcome the lack of enablement, indefiniteness and anticipation rejections that had been set forth in the previous Office Action.

In response, Applicants acknowledge and appreciate the withdrawal of these rejections.

In the Final Office Action, however, the Examiner has maintained the obviousness rejections of claims 1-10 and claim 11 was newly rejected under 35 U.S.C. § 103(a) as being unpatentable over Oosterwijk et al. (a) (WO 88/08854, Published 11/17/1988) in view of Oosterwijk et al. (b) (Seminars in Oncology. 1995. 22(1):34-41) in view of Robinson et al. (U.S. Patent No. 5,618,920; issued 4/8/1997) and in view of Queen et al. (U.S. Patent No. 5,530,101; issued 6/25/1996). The Examiner reiterated his position that the monoclonal antibody G250 was already known at the time of filing of the Application, and its use in the therapy of renal cell carcinoma was also known and one skilled in the art already had all the means to decipher the nucleic acid sequences of the V_H and V_L of the already known G250 antibody, and therefore one skilled in the art would have been able to figure out the specific sequences recited in the claims of the application if one wished to do so.

The Examiner also entered a new obviousness rejection of claims 1-11 under 35 U.S.C. § 103(a) as being obvious over Weijtens et al. (The Journal of Immunology,

157:836-843, 1996) in view of Oosterwijk et al. (b) (Seminars in Oncology. 1995. 22(1):34-41) in view of Orlandi et al (Proc. Natl. Acad. Sci. USA, 86:3833-3837, 1989) in view of Cabilly et al. (U.S. Patent No. 4,816,567; issued 3/28/1989) in view of Robinson et al. (U.S. Patent No. 5,618,920; issued 4/8/1997) in view of Huston et al. (U.S. Patent No. 5,258.498, issued 11/93) and in view of Queen et al. (U.S. Patent No. 5,530,101; issued 6/25/1996). The Examiner's contention is that it would have been obvious to one of ordinary skill in the art, at the time the claimed invention was made, to combine the methods taught by Orlandi et al., Cabilly et al., Robinson et al. and Huston et al. to obtain the nucleic acids encoding the V_H and V_L from the G250 hybridoma taught by Weijtens et al. and produce host cells and nucleic acids encoding humanized G250 antibodies and antigen-binding fragments thereof for therapy in renal cell carcinoma patients as taught by Oosterwijk et al. and to further humanize the antibody as taught by Queen et al. Applicants respectfully traverse.

In the U.S. Supreme Court's recent opinion in KSR Int'l Co. v. Teleflex, Inc., No. 04-1350 (U.S. Apr. 30, 2007), the Court noted that it was "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" KSR, slip op. at 15 (emphasis added). The Court specifically stated that:

[o]ften, it will be necessary . . . to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by the person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combined the known elements in the fashion claimed by the patent at issue.

Id. at 14 (emphasis added).

In the present case, the Examiner's apparent reason, inter alia, to combine the references cited in the latter 35 U.S.C. § 103(a) rejection is that "the variable regions can conveniently be derived from presently known sources using readily available

hybridomas." See p. 9 of Final Office Action (emphasis added.). The Examiner's apparent reason, inter alia, to combine references in the former remaining 35 U.S.C. § 103(a) rejection is that one of ordinary skill in the art would be motivated to use the hybridoma producing the monoclonal G250 antibody, as disclosed by Oosterwijk et al., to determine the nucleic acid sequences of the V_H and V_L genes.

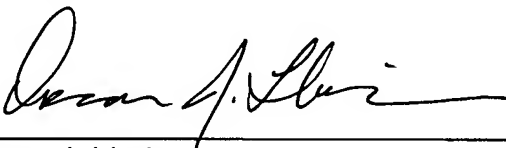
In response, Applicants are submitting herewith a Rule 132 Declaration by Reinder LH Bolhuis, a named inventor of the present application, and Rule 132 Declarations by Egbert Oosterwijk and Sven Warnaar, listed coinventors of a U.S. patent application, serial number 10/470,940, which claims a hybridoma cell producing G250 monoclonal antibody. Oosterwijk is also the co-author of one of the cited references. The Declarations assert that because there was never any public deposition of the G250 hybridoma cells of Weijtens et al. and Oosterwijk et al. and that because use of the hybridoma cells was restricted, one of skill in the art would not have been able to create the hybridoma cell producing G250 monoclonal antibody from either Weijtens et al. or Oosterwijk et al. Moreover, these Declarations demonstrate that the G250 hybridoma cells of the present invention were anything but "readily available." In other words, one of ordinary skill in the art could not use the hybridoma producing the monoclonal G250 (to determine the nucleic acid sequences of the V_H and V_L genes) if they could not have any access to it. Applicants respectfully submit, therefore, that the Examiner's apparent reason for combining the cited references is based on a faulty premise.

The Examiner further argued in the Final Office Action that Weijtens et al. have determined the nucleic acid sequences encoding the V_H and V_L antibodies simply because Weijtens et al. also teach that the genes encoding V_H and V_L of the G250 monoclonal antibody were isolated from cDNA prepared from the G250 hybridoma producing cells. Applicants respectfully submit that this conclusion is flawed. One of ordinary skill in the art can isolate a specific gene without determining the full nucleic acid sequence of the gene being isolated. In Weijtens et al., there is no guidance

leading one to the actual sequences. The mere knowledge of the existence of monoclonal G250 antibody or a hybridoma cell producing the antibody does not impart knowledge of how to obtain the antibody or the hybridoma cell from scratch. As a result, there could be no reasonable expectation of success that the nucleic acid sequences of the heavy and light chain CDRs of the known G250 antibody could be established using the techniques disclosed in the Examiner's cited references. Therefore, Applicants respectfully request reconsideration and withdrawal of the obviousness rejections under 35 U.S.C. § 103(a) and submit that the rejection is improper and should be withdrawn.

In view of the foregoing, it is submitted that the present application is now in condition for allowance. Reconsideration and allowance of the Application is requested. The Director is authorized to charge any fees or overpayment to Deposit Account No. 02-2135.

Respectfully submitted,

By 
Oscar J. Llorin
Agent for Applicants
Registration No. 48,315
ROTHWELL, FIGG, ERNST & MANBECK, P.C.
Suite 800, 1425 K Street, N.W.
Washington, D.C. 20005
Telephone: (202) 783-6040
Facsimile: (202) 783-6031

Attachment: Rule 132 Declaration of Reinder LH Bolhuis
Rule 132 Declaration of Egbert Oosterwijk
Rule 132 Declaration of Sven Warnaar